Synapse™ "Smart Cable" for PC Wedge Interface Guide

70-12805-02

Revision B

January 1997

For the following Model Configurations:

STI80-01XX

STI80-02XX

STI80-03XX

70-12805-02 Revision B
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FCC Information

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Canadian Information

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Introduction

The Synapse™ "Smart Cable" family provides connection to many host systems by simply changing the Synapse cable, so your scanner can interface to virtually any host.

The Synapse cable you've purchased may connect to several PC wedge terminals, and allows your scanner to easily transfer between terminals.

Programming

There are two types of parameters used to program your system: scanner parameters, contained in your scanner programming guide, and interface (Synapse) parameters, provided in this guide. Both types of parameters are stored in the scanner.

The default for each Synapse parameter is identified under the default bar code. If you're using the default settings, no bar codes need to be scanned to set up Synapse. (If you're using the LS 9100 scanner, the ENABLE LS 9100 COMMUNICATION bar code on page 5 must be scanned.) The programming bar codes in this guide can not be used to program other Synapse interface cables (cables that are not an STI80-01XX / 02XX / 03XX).

Power Supply

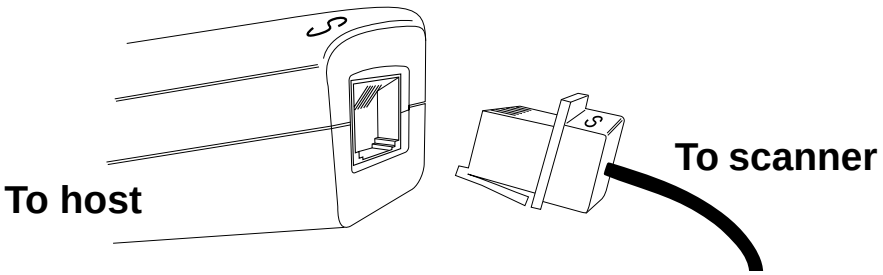
Listed below are the terminals supported by your PC Wedge Synapse cable. Because system configurations vary, certain hosts may not provide enough power for the system to operate. These systems will require a power supply. If your host is listed in the first column below, contact your Symbol representative to see if a power supply is needed for your system.

May Require Power Supply	**Will Require Power Supply**
IBM PC / AT and compatibles	NCR 7052
IBM PS / 2-50, 55SX, 60, 70, 80	
IBM PC / XT and compatibles	
IBM PS / 2-30	

Setup

Setting up Synapse is easy:

1. First, power down your host.
2. Plug your Synapse module into the scanning cable with the “S”-shaped graphics aligned.



   If you need to disconnect the cable from your Synapse module, squeeze the cable at the “S” and pull it from the module.
3. Connect the scanning cable to the scanner.
4. Disconnect the keyboard cable from the host, and plug that end of the cable into the Synapse mate connector.
5. Plug the other Synapse connector to the host, where your keyboard cable was initially connected.
6. If a power supply is required, plug the power supply in the Synapse power jack, and the other end into an AC outlet.
7. Power up your host.
8. If you are using an LS 9100 scanner, scan the ENABLE LS 9100 COMMUNICATION bar code on page 5.

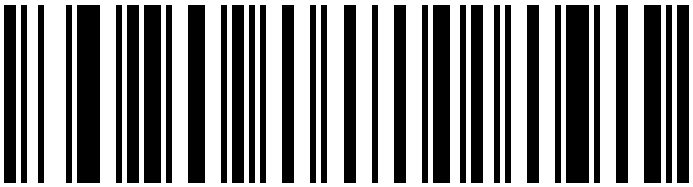
9. If you are using a host other than the default, scan a host bar code from *Host Selection* on page 6.
10. If you are not using a North American keyboard, scan the appropriate country bar code from *Country Selection* on page 8.
11. If you'd like to disable Ignore Unknown Characters, see *Ignore Unknown Characters* on page 11.
12. To change the Intercharacter Delay, see *Intercharacter Delay* on page 12.
13. To disable Fast Transmit, see *Fast Transmit* on page 14.

See *Set Synapse Defaults* on page 5 to reset defaults. For advanced parameter and default features, see *Advanced Features* on page 15.

If you're having any problems with your system, see *What If...* on page 24.

Set Synapse Defaults

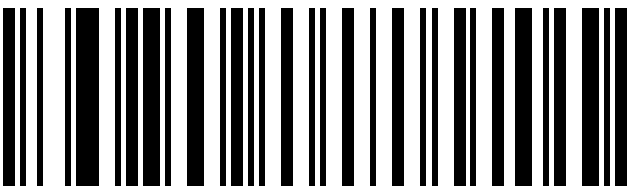
Scan the bar code below to set defaults for the parameters in this guide. See *Set Synapse Defaults (Advanced)* on page 17 for advanced Synapse Default options.



SET SYNAPSE PC WEDGE DEFAULTS

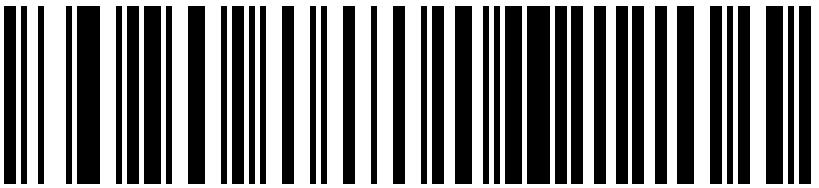
Enable LS 9100 Communication

If you're using an LS 9100, scan the bar code below to communicate with Synapse. You'll hear a warble beep. If, after using Synapse, a non-Synapse interface is enabled in your LS 9100 scanner, this bar code will need to be scanned again to re-enable the Synapse interface.

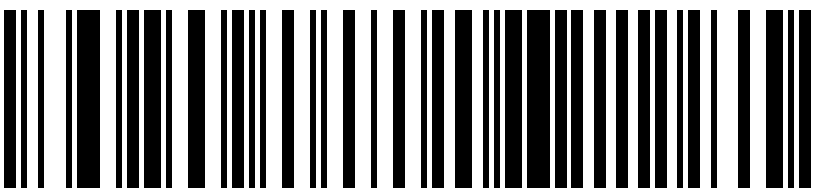


ENABLE LS 9100 COMMUNICATION

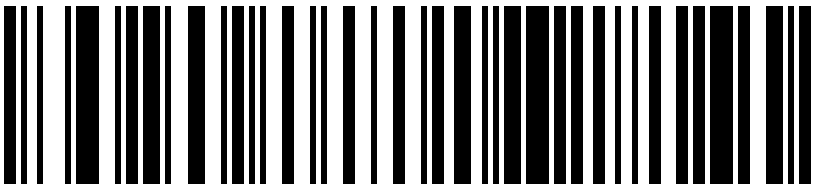
Host Selection



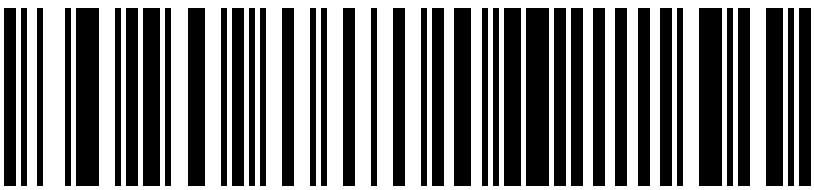
IBM PC/AT
IBM PS/2-50, 55SX, 60, 70, 80
(DEFAULT)



IBM PC/XT

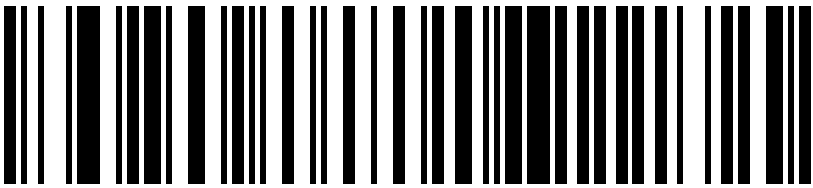


IBM PS/2-30

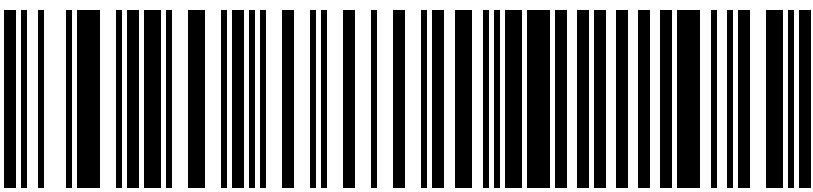


NCR 7052

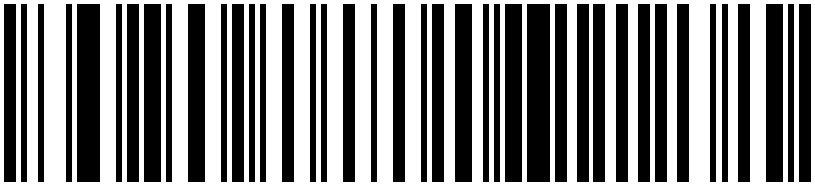
Country Selection



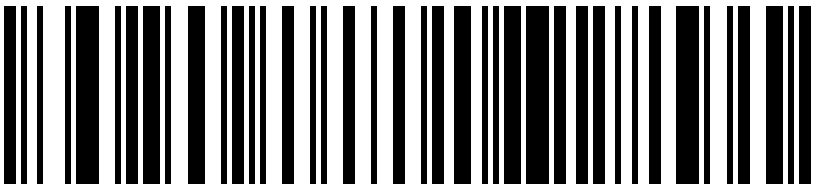
NORTH AMERICAN
(DEFAULT)



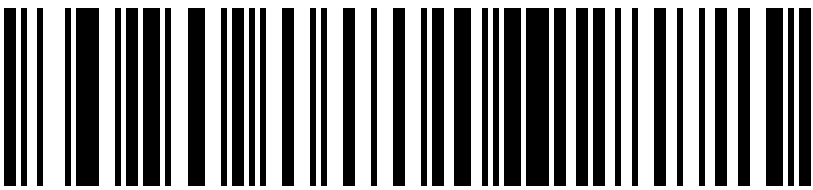
GERMAN



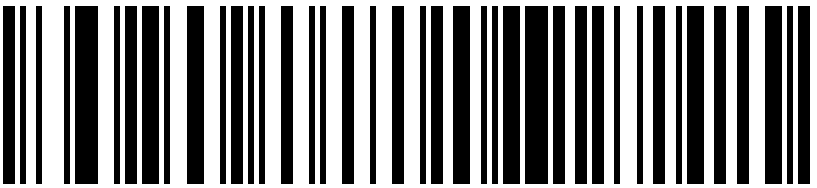
FRENCH



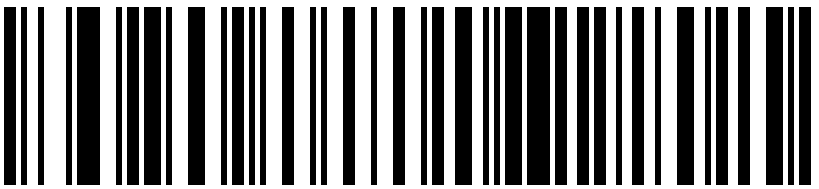
FRENCH INTERNATIONAL



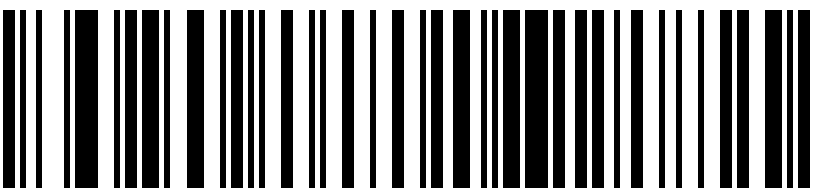
SPANISH



ITALIAN



SWEDISH

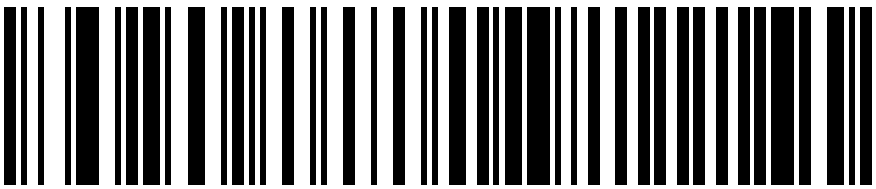


BRITISH

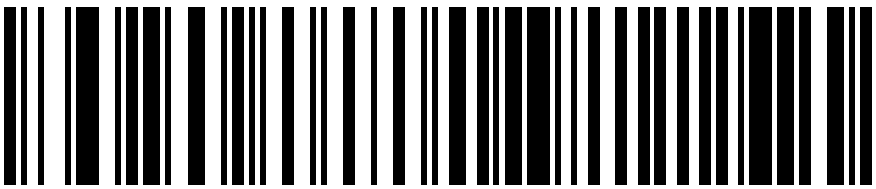
Ignore Unknown Characters

Unknown characters are characters the host does not recognize. When Send Bar Codes With Unknown Characters is selected, all bar code data is sent except for unknown characters, and no error beeps are sounded. When Do Not Send Bar Codes With Unknown Characters is selected, no bar code data containing at least one unknown character is sent to the host.

Scan the appropriate bar code to enable or disable this parameter. The default is Send Bar Codes With Unknown Characters.



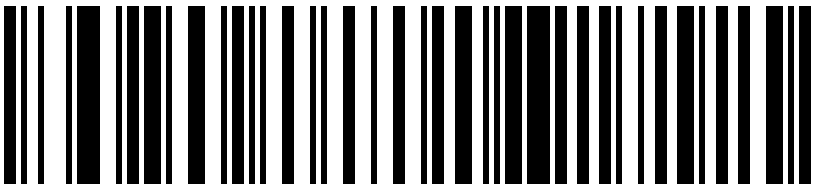
SEND BAR CODES WITH UNKNOWN CHARACTERS (DEFAULT)



DO NOT SEND BAR CODES WITH UNKNOWN CHARACTERS

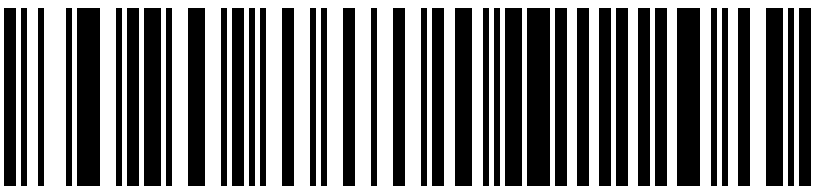
Intercharacter Delay

Selecting an intercharacter delay gives the host system time to service its receiver and perform other tasks between characters. The default is Short Delay, so if this is your preference, you don't need to scan this bar code unless you've previously selected another option.

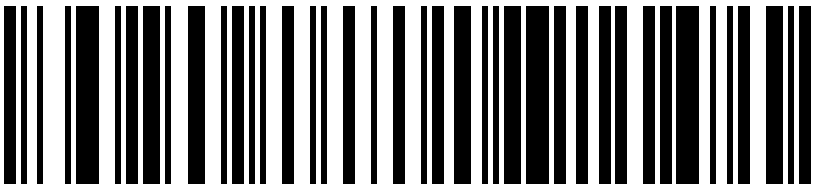


SHORT (5 MS) DELAY (DEFAULT)

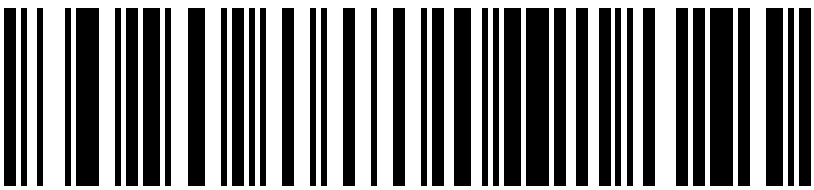
For systems that can handle faster character transmission, the **NO DELAY** bar code below can be scanned.



NO (1 MS) DELAY



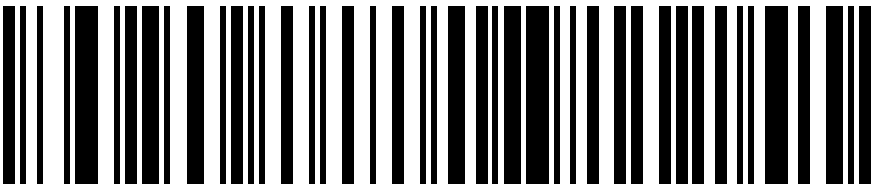
MEDIUM (50 MS) DELAY



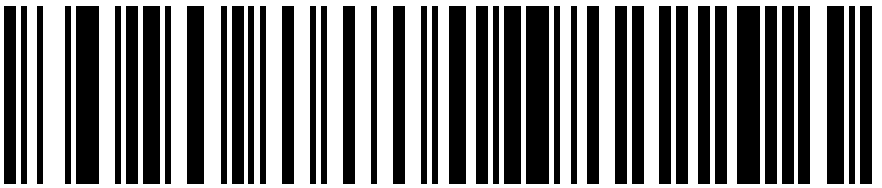
LONG (99 MS) DELAY

Fast Transmit

Older systems may require a slower transmission method. If your system still needs additional time to process keyboard data after setting an Intercharacter Delay, scan **DISABLE FAST TRANSMIT**.



ENABLE FAST TRANSMIT (DEFAULT)



DISABLE FAST TRANSMIT

Advanced Features

Select Parameter Set

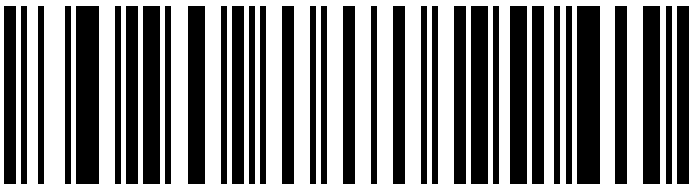
This option allows you to store different parameter settings for each place the scanner is used, as well as to select a parameter set once it is programmed.

Programming Parameter Sets

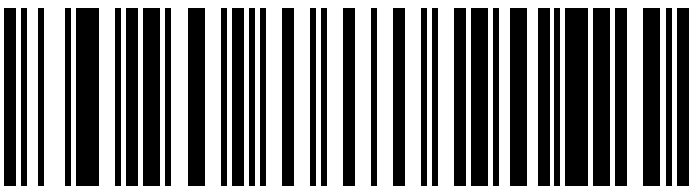
To program the parameter set where the scanner is connected to a host, scan a Select Parameter Set bar code, then scan the parameter options in this guide needed for this set. **Note:** Because Parameter Set 1 is the default, you don't need to scan this bar code - the first group of parameters you select will automatically be designated Parameter Set 1.

Enabling a Parameter Set

To enable the set you'll be using after it's programmed, scan that Select Parameter Set bar code.



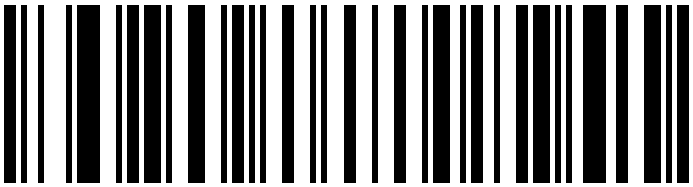
SELECT PARAMETER SET 1
(DEFAULT)



SELECT PARAMETER SET 2

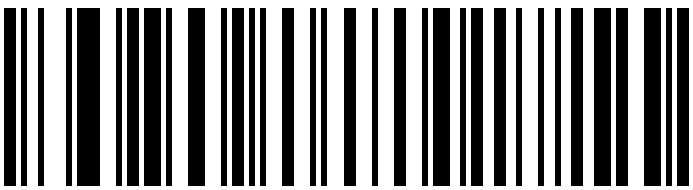
Set Synapse Defaults (Advanced)

Scan the following bar code to set defaults for the current parameter set.



**SET SYNAPSE PC WEDGE DEFAULTS:
CURRENT PARAMETER SET**

Scan the bar code below to set defaults for all Synapse cables.

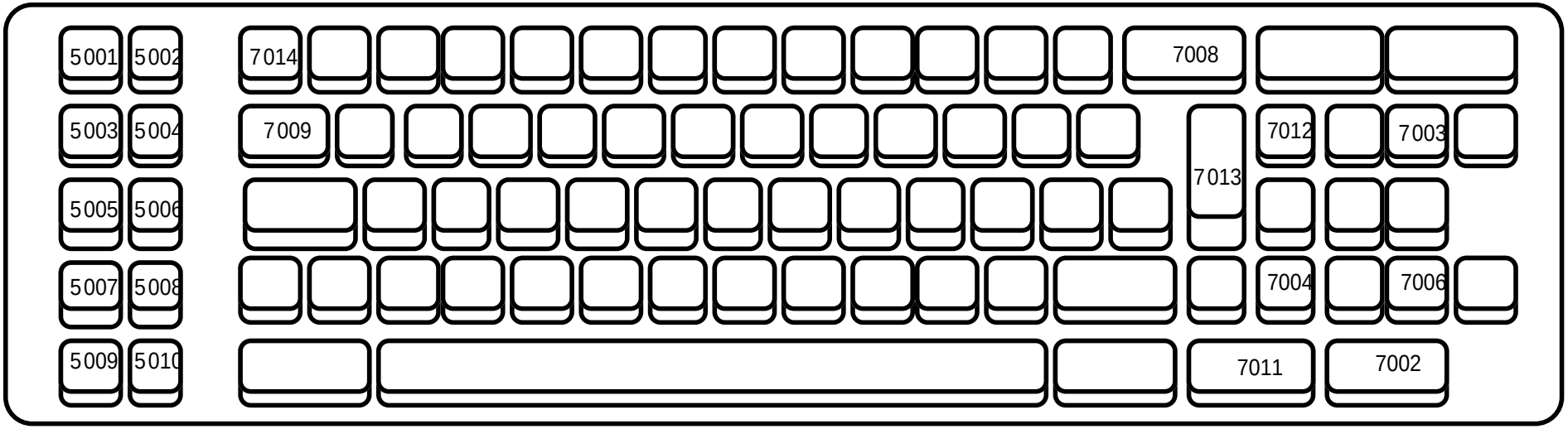


**SET SYNAPSE DEFAULTS:
ALL CABLES AND PARAMETER SETS**

Keyboard Maps

The keyboard maps on the following pages are provided for prefix / suffix keystroke parameters, and are used only with scanners that support data formatting. To program the prefix / suffix values, refer to your scanner's Programming Guide.

Note: If you are programming an LS 1000 scanner, please refer to the *LS 1000 Product Reference Guide* for keyboard values.


5001
5002
7014
7008
5003
5004
7009
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7013
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5006
5007
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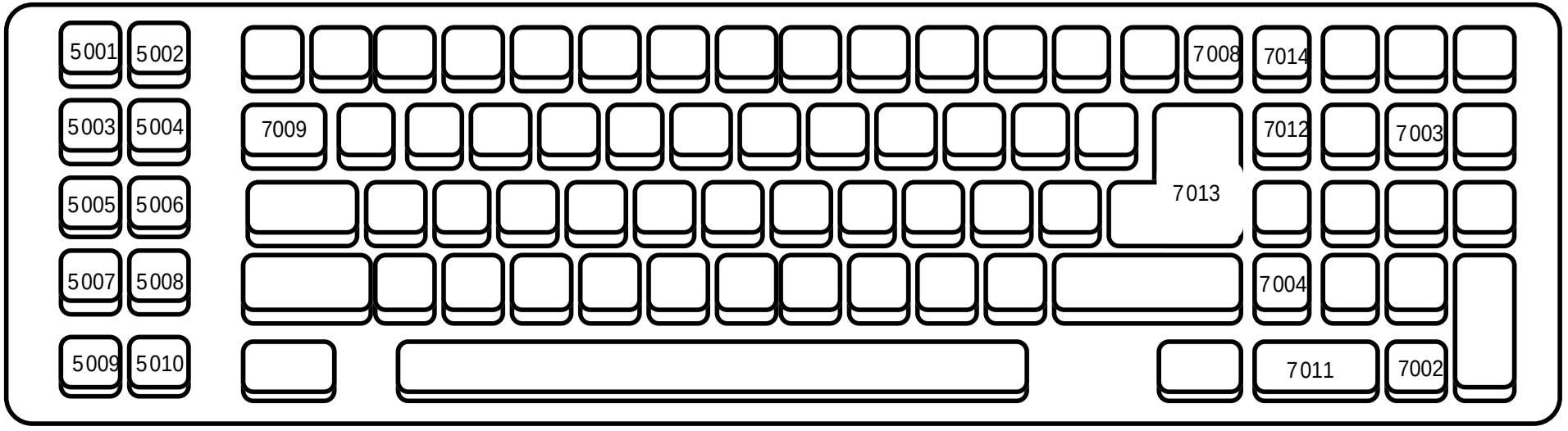
7004
7006
5009
5010
7011
7002

IBM PC/XT


5001
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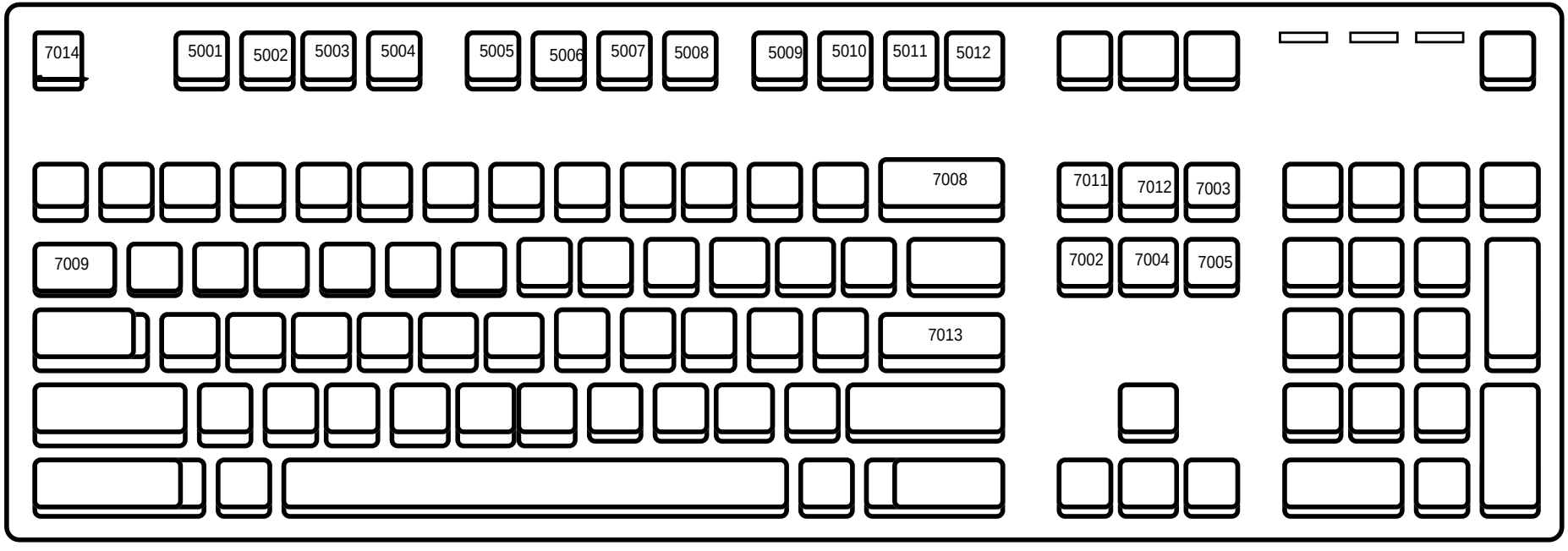
IBM PC/AT


7014
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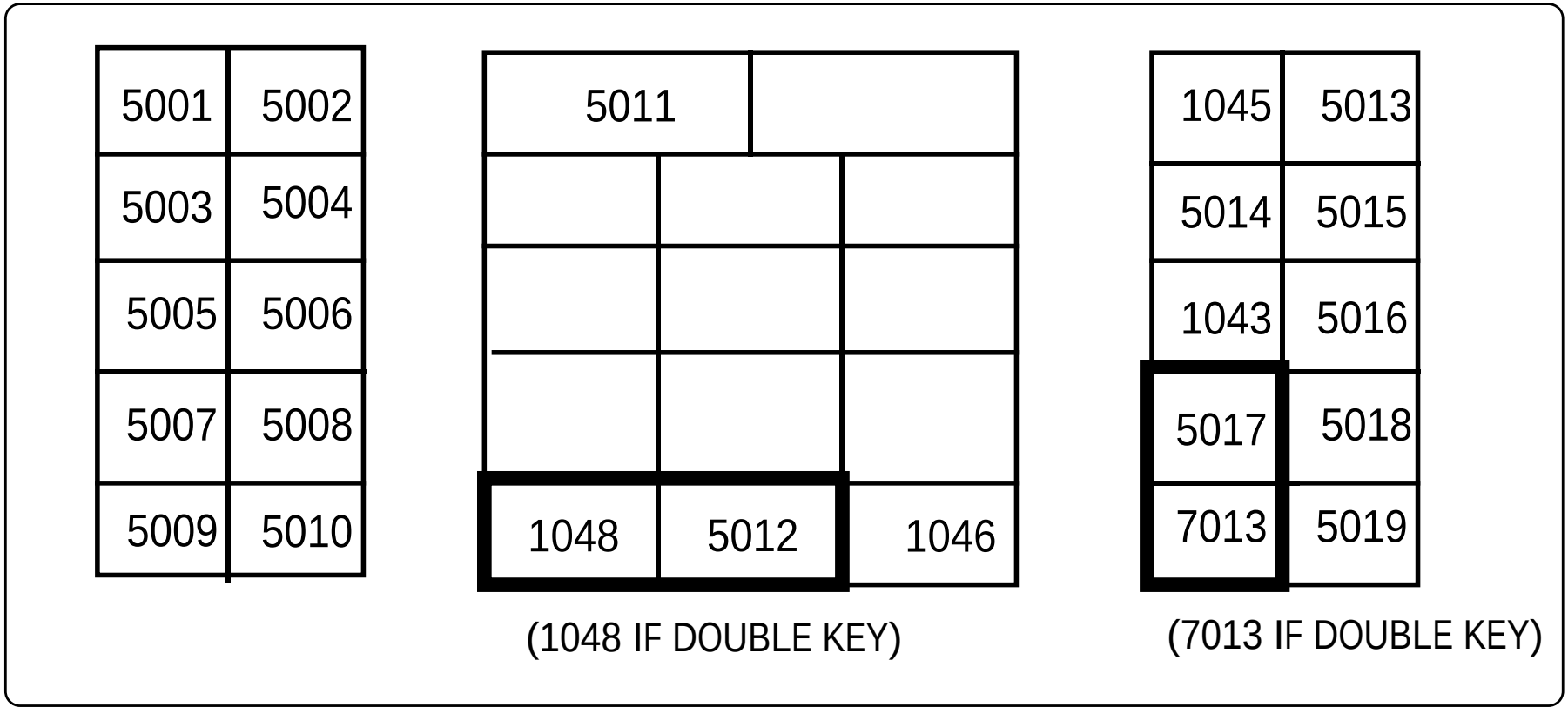
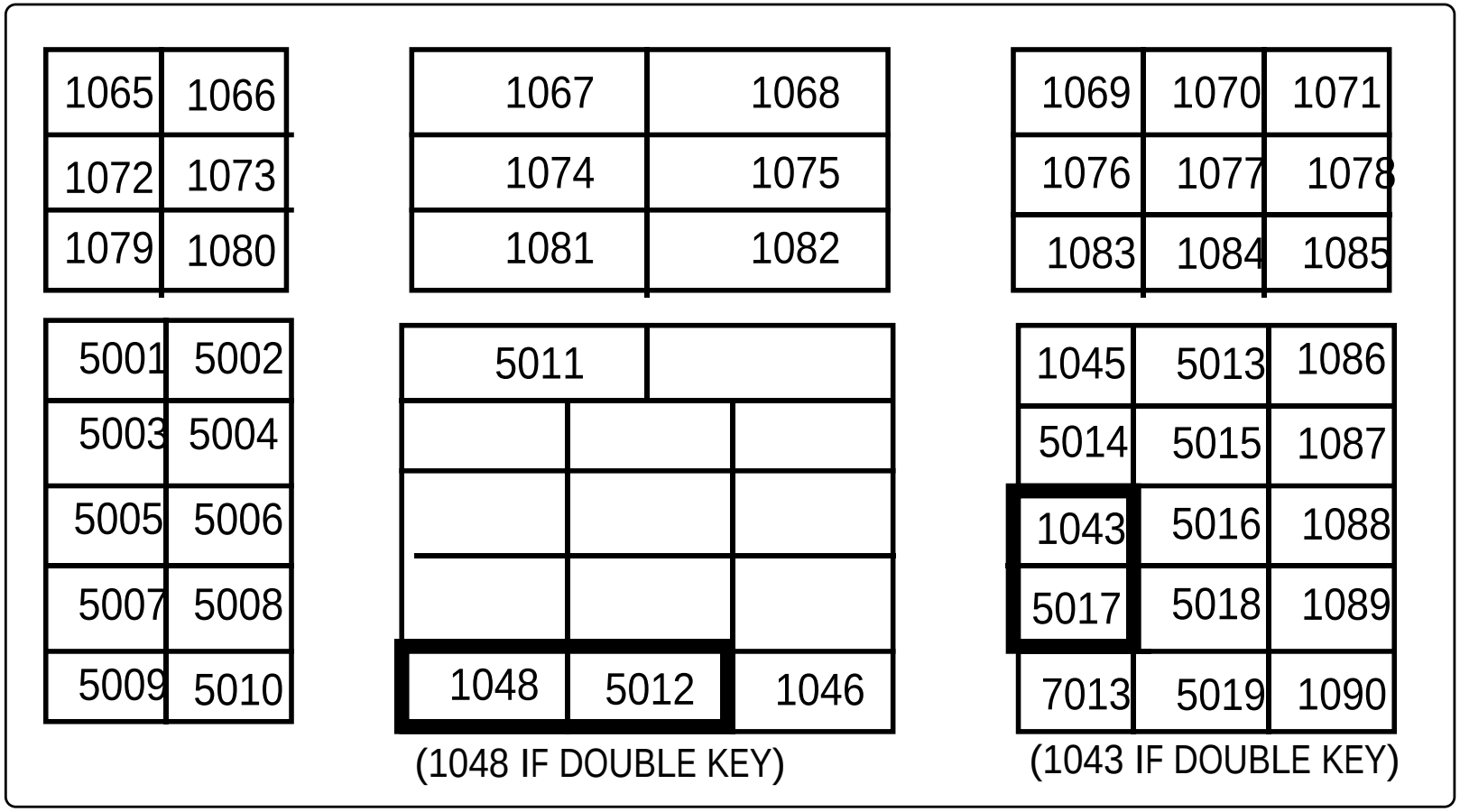
7013

IBM PS/2



NCR 7052 32-Key



NCR 7052 58-Key

What If...

What If...	Then...
Synapse parameters are not working?	Make sure you're using the correct Interface Guide. Make sure you've selected the correct parameter set. If you scanned a Set Defaults bar code from your scanner manual, re-enter your Synapse parameters.
No data transmits, or Incorrect data transmits, or you hear a lo/lo/lo/lo beep?	If you're using an LS 9100, scan ENABLE LS 9100 COMMUNICATION bar code on page 5. Check cable connection to scanner and host. Make sure the correct terminal type and country code parameters are set for the currently attached scanner.
Scanner displays erratic behavior (laser doesn't come on, scanner emits frequent beeps)?	Attach a power supply. Check with scanner's Product Reference Guide to make sure scanner can communicate with Synapse.

What If...	Then...
Lo / hi / lo / hi beep sequence sounds?	Parameter storage space in the scanner is full. Scan a Set Synapse Defaults bar code from page 5 or page 17 for cables no longer in use.

See the next page if you're still having trouble.